

CLAIMS

1. A sound-insulating floor covering, in particular for motor vehicles, comprising a carpet layer (2) which on the underside comprises a base substrate (3), and a sub-layer (8, 9) which is bonded to the underside of the carpet layer by means of a hot-melt adhesive (5, 6) applied in multiple stages, characterized in that directly to the base substrate of the carpet layer (2) a hot-melt adhesive (5) is applied which has an average mass flow rate of the melt ranging from 190 to 210 g/10 min and has a lower melting point than a hot-melt adhesive (6) which is applied in a subsequent stage and which has an average mass flow rate of the melt ranging from 140 to 160 g/10 min.
2. The floor covering according to claim 1, characterized in that the hot-melt adhesive (5) which is applied directly to the base substrate (3) of the carpet layer (2) is applied at a lower mass per unit area than the hot-

melt adhesive (6) which is applied in the subsequent stage.

3. The floor covering according to claim 1 or 2, characterized in that at least one of the hot-melt adhesives (5, 6) comprises mineral microbodies and/or hollow mineral microbodies (7).
4. The floor covering according to claim 1 or 2, characterized in that the hot-melt adhesive (6) which is applied in the subsequent stage comprises mineral microbodies and/or hollow mineral microbodies (7).
5. The floor covering according to any one of claims 1 to 4, characterized in that the base substrate (3) is a woven fabric, knitted fabric or nonwoven fabric, wherein the hot-melt adhesive (5) which is applied directly to the base substrate (3), and the hot-melt adhesive (6) which is applied in the subsequent stage form an adhesive

layer which comprises a multitude of gaps (16) which define fluid-permeable passages.

6. The floor covering according to any one of claims 1 to 5,

characterized in that

the sub-layer comprises a layer of nonwoven fibre fabric (8) and/or a heavy layer (9).

7. The floor covering according to any one of claims 1 to 6,

characterized in that

the hot-melt adhesive (6) which is applied in the subsequent stage comprises one or several crosslinking additives.

8. The floor covering according to any one of claims 1 to 7,

characterized in that

the hot-melt adhesive (6) which is applied in the subsequent stage comprises a flame retardant.

9. The floor covering according to any one of claims 1 to 8,

characterized in that

the hot-melt adhesive (6) which is applied in the subsequent stage comprises particles which expand under the effect of heat.

10. A method for producing a floor covering according to any one of claims 1 to 9, in which in several stages hot-melt adhesive (5, 6) is applied to the backing of a carpet layer (2) which on the underside comprises a textile base layer (3), and a sound-insulating sub-layer (8, 9) is applied to the hot-melt adhesive,

characterized in that

a hot-melt adhesive (5) is applied directly to the base layer (3) of the carpet layer (2), which hot-melt adhesive (5) has an average mass flow rate of the melt ranging from 190 to 210 g/10 min, and a lower melting point than a hot-melt adhesive (6) which is applied in a subsequent stage and which has an average mass flow rate of the melt ranging from 140 to 160 g/10 min.

11. The method according to claim 10,

characterized in that

the hot-melt adhesive (5) which is applied in the first stage is applied at a lower mass per unit area than the hot-melt adhesive (6) which is applied in the subsequent stage.

12. The method according to claim 10 or 11,  
characterized in that  
the hot-melt adhesive (5) which is applied directly to the base layer (3) of the carpet layer (2) and the hot-melt adhesive (6) which is applied in the subsequent stage are each scattered-on in the form of powdered hot-melt adhesive, and are melted-on prior to the application of the sound-absorbent sub-layer, either together or spaced apart in time.
  
13. The method according to any one of claims 10 to 12,  
characterized in that  
mineral microbodies and/or hollow mineral microbodies (7) are added to the hot-melt adhesive (6) which is applied in the subsequent stage.
  
14. The method according to any one of claims 10 to 13,  
characterized in that

a woven fabric, knitted fabric or nonwoven fabric is used as the base substrate (3), and the hot-melt adhesive (5) which is applied directly to the base substrate (3) of the carpet layer (2) and the hot-melt adhesive (6) which is applied in the subsequent stage are applied such that after solidification of the hot-melt adhesives (5, 6) an adhesive layer is formed which comprises a multitude of gaps which define fluid-permeable passages.

15. The method according to any one of claims 10 to 14, characterized in that

a layer of nonwoven fibre fabric (8) and/or a heavy layer (9) are/is applied as a sound-absorbent sub-layer.

16. The method according to any one of claims 10 to 15, characterized in that

a crosslinking additive is added to the hot-melt adhesive (6) which is applied in the subsequent stage.

17. The method according to any one of claims 10 to 16, characterized in that

a flame retardant is added to the hot-melt adhesive  
(6) which is applied in the subsequent stage.

18. The method according to any one of claims 10 to 17,  
characterized in that  
particles which expand under the effect of heat are  
added to the hot-melt adhesive (6) which is applied  
in the subsequent stage.